rightful owners, and that in such cases the Cuckoos' eggs have contrasted very strongly with the others. Such nests I have come across in the case of species of *Suya*, *Cisticola*, *Horornis*, *Garrulax*, *Mesia*, *Liothrix*, *Anthus*, and, finally, *Lanius*; and in this last case it looked as if the Shrike, in a fury at the deception attempted on itself, had itself broken the Cuckoo's as well as its own eggs, since all were smashed, evidently by a bird's bill.

In another case two nests of *Anthus striolatus* each containing a Cuckoo's egg were found deserted. The nests were close together on "The Peak" near Shillong, and the Cuckoo's eggs, evidently laid by the same Cuckoo, were of the white boldly speckled type, quite unlike the dull brown eggs of the Pipit. Again, it must be remembered that deserted nests with eggs are not often found, which is hardly to be wondered at, for vermin soon dispose of any eggs which are not well protected. Again, nests found only a day or two after desertion do not in any way show the finder that they have been deserted, for the parent birds often hang about the site of a deserted nest for days after they have made up their minds to leave it. In addition to all this, however, it must be noted that there are also occasions on record in which a bird has built a second nest actually on the top of the first, rather than hatch a Cuckoo's egg laid in that first made.

XXII.—*On the Linnean Names* Strix funerea *and* Anser erythropus, *and on the Species which should be referred to them.* By Dr. Einar Lönnberg of Stockholm.

In the tenth edition of the 'Systema Naturæ,' 1758, the name *Strix funerea* was given by Linnæus to a Swedish Owl, which, according to the quotation by the author himself, is described as no. 51 in the 'Fauna Svecica,' 1746. In the latter work we find for species no. 51 a short diagnosis, a quotation "Rudb. pict." . . . , and a description. "Rudb. pict." refers to the coloured plates which Professor Olaf

Rudbeck * of Upsala had prepared, and which Linnæus had ample opportunities of studying when he, as a student, lived in Rudbeck's house and was allowed full admission to his library. According to the quotation in the 'Fauna Svecica' (*l. c.*), Rudbeck called the Owl in question "Noctua major, oculorum iridibus pallide luteis." These words are also still to be read on Rudbeck's original plate no. 170, which represents a specimen of Tengmalm's Owl. Most of Rudbeck's coloured bird-plates are preserved in the library of Baron C. De Geer at his estate Löfsta in Upland. There is also a set of copies, prepared by Rudbeck himself about 1720, in the library of the Royal University of Upsala. In the latter series the corresponding plate has the number 10. There ought perhaps also to be mentioned here that in both sets of plates there is another coloured figure of Tengmalm's Owl as well, viz., no. 165 among the originals and no. 9 among the copies. This latter figure and its duplicate has the same Swedish name "Större Stenuglan" (*i. e.* "Greater Stone-Owl") inscribed on them as on the previously mentioned plates, and the Latin "name" or diagnosis differs only by giving another colour of the eyes, viz., "iridibus croceis." But although both these two pairs of plates represent the same kind of Owl (as was also evidently Rudbeck's opinion), and are very similar (with the exception of the colour of the eyes), they are very different in size, and the first-mentioned pair appears to represent a much larger bird. This is the reason why Linnæus, when, in the 'Fauna Svecica,' 1746, he refers to Rudbeck's original plate no. 170, says: "Magnitudo corvi"; but, referring to the original plate no. 165, says, "Magnitudo cuculi" (*conf.* 'Fauna Svecica,' 1746, sp. 50). This different size induced Linnæus to regard these plates as possibly representing two different species, and he quotes them under two different numbers in the 'Fauna Svecica,' 1746, but he gave only one of them a name in the

* It is thus erroneous when Hartert, in 'A Hand-list of British Birds' (London, 1912), p. 105, footnote, states that the name *funerea* "was principally based on a figure by Billberg representing Tengmalm's Owl."

'Systema Naturæ,' 1758, viz., *Strix funerea*. The plates are quite easily recognizable in both sets, and they prove that no. 50 as well as no. 51 of the 'Fauna Svecica' represent Tengmalm's Owl according to Rudbeck's plates, in spite of the difference in size of the figures. Rudbeck's plate 170 is the type of species 51 in 'Fauna Svecica,' 1746, as the quotation there proves, and to this species the name *funerea* was given in 1758. Seeing that the plate, as stated above, very distinctly displays a coloured figure of Tengmalm's Owl, it is quite plain that this species must have the specific name *funerea* attatched to it, even if Linnæus has exaggerated the size of the bird by saying "Magnitudo corvi."

But, supposing that, in spite of everything, this was not evident enough, the description in the 'Fauna Svecica' cannot be applied to any other Swedish Owl. Linnæus writes, "Corpus totum supra sordido-cinereum, maculis pisiformibus albis." These round white spots which are so characteristic of Tengmalm's Owl, and which have given it its modern Swedish name, "Pärluggla" = "Pearl-Owl," are not to be found in any other Swedish Owl. It is true that *Surnia ulula* also has white spots, but that Owl was very well known to Linnæus, and when he describes it as no. 52 in 'Fauna Svecica' he writes, "Corpus supra fuscum, maculis albis majusculis adspersum" (not to mention several other characteristics, as the undulated pattern of the breast, the long tail, &c.). He thus correctly points out that the white spots of the Hawk-Owl are larger than in the species which he later called *funerea*. From this, I hope, it will be concluded that the specific name *funerea* is the first and correct one for Tengmalm's Owl, because a good and easily recognizable coloured plate must be as good a type as a skin.

The name "*Anas erythropus*" was given in the 'Systema Naturæ,' 1758, by Linnæus to the Goose described in 1746 in the 'Fauna Svecica' as no. 92. In this latter work we find a quotation, "*Rudb. pict.* Anser cinereus ferus, torque inter oculos & rostrum albo, erythropes." This proves that Linnæus originally based this species on one of Rudbeck's coloured plates, which had such an inscription

as the one quoted. Unfortunately this plate does not exist any longer, but it is known that a great number of Rudbeck's plates were prepared during his journey to Lapland. It is thus probable that he obtained the original for the now lost Goose-plate at that time as well. If this supposition is correct, it must have been a specimen of the *Lesser* White-fronted Goose, because the larger species is not to be found there. This is not satisfactory proof, I admit. Further evidence, however, can be obtained by studying other Linnean papers. One of these is his "Methodus Avium Sveticarum," which was first written in Upsala in 1731, and was chiefly, or at least to great extent, based on Rudbeck's bird-plates. Subsequently Linnæus carried this little manuscript book with him in his pocket as a kind of ornithological diary, and entered in it the notes on, or descriptions of, such birds as he happened to obtain during his travels to various parts of Sweden *. As species no. 63 in this "Methodus" we find Rudbeck's White-fronted Goose mentioned with the short diagnosis which this author had written on his plate, and which has been quoted above. At a later opportunity, Linnæus added, "femina est in Helsingia rostrum sordide carneum, frons albus, caput, collum, dorsum et cauda järngrå [a Swedish word, which means "iron-grey"], pectus et venter candidus, maculis ad finem sterni nigrescentibus aspersis, pedes sanguinei." This appears to indicate that Linnæus at some opportunity during his travels in northern Sweden had a fresh female specimen of a White-fronted Goose before him, and as only the *Lesser* White-fronted Goose occurs there it must have been such a one. It is also evident that it is just these notes with few alterations which have been used for the "description" of species 92 of the 'Fauna Svecica,' 1746.

In the year 1751 Linnæus lectured in Zoology at the Royal University of Upsala. These lectures exist in several manuscripts (one of which is about to be printed). In these lectures Linnæus says, "*Anser erythropus,*

* This "Methodus" has been printed from the manuscript (1907, Upsala).

Fn. [='Fauna Svecica'] 92. Hellsinggås*, as Clusius names it, and it is certain that it, in our country, chiefly lives in Helsingeland [=Helsingia, at that time meaning northern Sweden generally]; but that it has received its name from this can neither be proved nor denied. This as well as .... species lay their eggs in our country, and hatch their young here, but fly from us during the winter and become useful to other nationalities, and they are shot in Holland in considerable quantities. They have rather palatable flesh, and it is a pity that we do not use them, as we have more right to do so, because they propagate in our country." This proves very plainly that Linnæus regarded *Anser erythropus* as a species breeding in Sweden, and as this only is the case with the *Lesser* White-fronted Goose (*not* with *Anser albifrons* Scop.), the specific name "*erythropus*" must be used for the smaller form.

Anser albifrons Scop. has never been found breeding in Sweden. Every statement to the contrary is based upon error.

XXIII.—*A Reference List of the Birds of New Zealand.* Part II. By Gregory M. Mathews, M.B.O.U., and Tom Iredale.

[Continued from p. 263.]

Order ARDEIFORMES.

Family PLEGADIDÆ.

Genus PLEGADIS.

Plegadis Kaup, Skizz. Entwick.-Gesch. Nat. Syst. p. 82, 1829.

Type (by monotypy) : *P. falcinellus* (Linné).

Plegadis falcinellus (Linné). Glossy Ibis.

Tantalus falcinellus Linné, Syst. Nat. 12th ed. 1766, p. 241 : Austria.

Synonym :—

Plegadis falcinellus Buller, Suppl. vol. i. p. 192.

* In translation from the Swedish text.